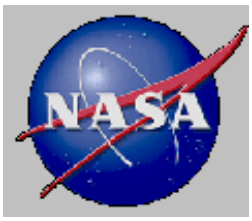

An electronic publication from the NASA Scientific and Technical Information (STI) Program

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...From the STI Lead Center at Langley

STI Managers' Videoconference

STI Managers from the NASA Centers participated in a videoconference on September 28, 1998, and gave summaries regarding the state of their programs and current changes, issues, problems, and solutions. In addition, STI Program Office and Headquarters STI personnel gave updates on program status, yearly self-assessments by the Centers, export control and international STI, machine translations, acquisitions of STI, and new initiatives.

New Acquisitions of STI

More than 156,812 citations from 1994 to 1998 have been added to the STI Database from AIAA. In addition, 39,926 citations from Engineering Index/COMPENDEX have been added. Beginning in mid-to-late November, more than 4,000 full-text images and other citations from IEEE/IEE will be made available to the NASA centers on a 1-year trial membership. The STI Program is also concentrating on acquiring more NASA-produced STI. Selected actions from an Agency-wide customer group that recently recommended ways http://stipo.larc.nasa.gov/stiteam/workrept.html to acquire more NASA-produced STI are being incorporated into the 1999 STI Program Plan.

STI Products and Services Development Team

The STI Program Office has recently begun a new initiative, which is a review of STI services and products with a view toward customer needs and full-cost accounting. Through this group, STI products/services that are currently provided by the NASA Center for AeroSpace Information (CASI) for the STI Program will be evaluated based on customer requirements and feedback. A first task of this group is a redesign of the Agency's STI web page to make it more customer friendly and to segment information for specific customer groups.

For more information on any of the above items, please contact Roland Ridgeway at rridgeway@hq.nasa.gov or George Roncaglia at g.j.roncaglia@larc.nasa.gov

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...From GSFC

The Goddard Space Flight Center Technical Information Services Branch (TISB) Publications Group is working with the Center Export Control Administrator to revise its Centerwide Publication Policy. A working team is in place to develop a process that ensures all appropriate approvals are granted before any form of published NASA STI is disseminated. The team is comprised of the Publications Group and Center Export Control Administrator, as well as International Coordinator, Patent Counsel, and a representative from the Technology Commercialization Office.

The team plans to introduce the revised policy to the Center via a series of presentations to each directorate. Program managers, division heads and branch chiefs, authors, as well as secretaries will be encouraged to attend the presentations. The team will also work with the TISB Webmaster to get the word out to as many Center web curators and authorizers as possible. The presentations will illustrate the connectivity of the STI, Export Control, and Technology Transfer Programs and the ever-increasing need to advance NASA's goals in aeronautics and space-related science and technology.

The team hopes that with increased awareness and proper guidance, the Publications Group can acquire more STI-related products as well as appropriately protect new science and technology.

The Goddard Space Flight Center Library web site, http://library.gsfc.nasa.gov was in the spotlight recently as a place to "travel cyberspace to enter outer space at home." USA Today's Hot Sites first announced the GSFC Library's web site in its Friday, July 17, 1998 online issue, http://www.usatoday.com/life/cyber/chb0717.htm. The first page of the library web site is featured in the follow-up July 22 Tech Extra section of the print publication. Janet Ormes, Head, Library Branch, described the library's new web site this way, "It's a major step toward achievement of our goals in providing increased access to electronic information via the library."

The library's government and contractor (SANAD Support Technologies, Inc./NCI) staff worked together to achieve the dynamic site you see today, as part of the library's mission to provide innovative cost-saving information resources and technology.

The library web site offers worldwide access to the library's catalog, Goddard GALAXIE, as well as a Kid's Page. For GSFC employees, it offers access to electronic journals, remote request services, and a number of scientific and engineering databases.

The library's web site has received three other awards for web site excellence, including the Medaille d'Or, which also highlighted the NASA STS-86 crew's home page.

For more information, contact the library at library@sun.gsfc.nasa.gov , 301-286-7218, or Robin Dixon, Robin.M.Dixon@gsfc.nasa.gov, 301-286-9230.

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...From JPL

The Jet Propulsion Laboratory STI Program announces that the JPL Archives and Records Management Services are now being provided by Sherikon Space Systems.

The new telephone number for these services is (626) 449-1593, and the new fax number is (626) 449-3950. Also, they can be reached via e-mail at jplarchives@sherikon.com and their mailing address is Sherikon SpaceSystems, 145 N. Altadena Dr., Pasadena, CA 91107.

Dr. Michael Hooks, the JPL Chief Archivist, is the Contract Technical Manager for these services. Dr. Hooks can be reached at the Jet Propulsion Laboratory, 4800 Oak Grove Dr., Mailstop 111-113, Pasadena, CA 91109. His new phone number is (818) 345-8804. His e-mail address Michael.Q.Hooks@jpl.nasa.gov remains the same.

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...From JSC

NASA Special Publication 534, Extended Duration Orbiter Medical Project Final Report, 1989-1995

The Johnson Space Center has published NASA Special Publication 534, *Extended Duration Orbiter Medical Project Final Report, 1989-1995.* The publication presents the results of medical studies conducted on extended duration Shuttle flights from December of 1989 to September of 1995. Implementation of these flight studies centered on detailed supplementary objects (DSOs); the publication is a compilation of these DSOs. The groundwork for the EDO Medical Project was laid in 1988 when Congress allocated 125 million dollars to NASA for modifications to be made to the Shuttle, allowing flight times to be extended to 16 days. The Shuttle Program Office then asked the Johnson Space Center's Life Sciences Directorate and the Astronaut Office to evaluate the implications of extended mission durations. This evaluation was the springboard for the 40 million dollar EDO Medical Project. The Project extended beyond the scope of most government studies, soliciting participates from the academic community to help develop requirements and provide progress reviews throughout the life of the Project.

Winner of the 1998 Luigi Napolitano Book Award

The International Academy of Astronautics (IAA) has selected "Walking to Olympus: An EVA Chronology," written by David S. Portree and Robert C. Trevino and published by NASA, as the winner of the 1998 Luigi Napolitano Book Award. The award was presented in Melbourne, Australia, on September 27, during the 1998 IAA award dinner.

This monograph was produced through the auspices of the Extravehicular Activity (EVA) Office at Johnson Space Center, Houston. Portree, an historian, and Trevino, an engineer working in advanced EVA programs, collaborated on this chronology, which is envisioned as the first part of a larger effort to document the history of space walking. As NASA gets closer to the first launch in the assembly sequence of the International Space Station, this monograph is timely in showing what past EVAs have accomplished and what hurdles had to be surmounted to carry them out.

The International Academy of Astronautics was founded in Stockholm on Aug. 16, 1960. Since that time, the IAA has regularly brought together the world's foremost experts in the disciplines of astronautics to recognize the accomplishments of their peers; to explore and discuss cutting-edge issues in space research and technology; and to provide direction and guidance in the non-military uses of space and the ongoing exploration of the solar system. The Luigi Napolitano Book Award is given annually for a recent space-related publication by an individual or group who is not a member of the Academy.

Copies of the book can be obtained by contacting Dr. Roger D. Launius, senior NASA Historian via e-mail at roger.launius@hq.nasa.gov, fax at 202/358-2866, or phone at 202/358-0384.

Presentation to Japanese Information Specialists

Johnson Space Center STI personnel recently hosted a group of Japanese information specialists who were in Houston for the International Association of Records Management (ARMA) Conference. In keeping with the conference theme, *Exploring the Information Universe,* JSC gave presentations on Agency and Center STI programs. Topics included an overview of the Agency STI Program and descriptions of JSC's publications, STI Center, records management, and imagery products and services.

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NASA Thesaurus--New Electronic Products & Web Page

In the past year, there have been numerous requests from both government and private organizations regarding the availability of the NASA Thesaurus data in electronic form. To satisfy such requests the NASA Center for AeroSpace Information (CASI) has developed 2 new products: the **NASA Thesaurus Hierarchical Listing (ASCII File)** and the **NASA Thesaurus Term List (ASCII File)**.

- **NASA Thesaurus Hierarchical Listing (ASCII File)**

  The NASA Thesaurus Hierarchical Listing comprises all valid terms and hierarchies, non-postable USE references, and related terms contained in the NASA Thesaurus. Marked with an identifying tag, each element of the listing can be easily manipulated by the customer. The Hierarchical Listing is provided as an electronic text file in tagged ASCII format (file size 5.57 MB). This product is updated three times a year and is available as a single issue or as an annual subscription item.

- **NASA Thesaurus Term List (ASCII File)**

  The NASA Thesaurus Term List is an alphabetical listing of all the valid terms contained in the NASA Thesaurus. (Hierarchies, definitions, and cross references are not included.) The list is provided as an electronic text file in ASCII format (file size 308 KB). This product is updated three times a year and is available as a single issue or as an annual subscription item.

Aside from being a source of terminology for traditional indexing and retrieval, the data contained in these new products can be manipulated by a user to serve many other functions. In fact, of many inquiries received to date, most were related to the development of applications that would use the Thesaurus data in a non-traditional way. This is indicative of the emerging importance of structured concept schemes, such as the NASA Thesaurus, to the processing and management of information. Here are just a few ways users have applied the Thesaurus data:

* Concept mapping for advanced information retrieval systems

* Data mining from web sites

* Machine-aided indexing and classification

* Enhancement of spell-check dictionaries

In addition to the electronic file products, a newly created web page for the Thesaurus is now accessible from the NASA STI Homepage. The new site brings together information on the entire suite of Thesaurus products and resources available--including the browsable PDF versions of the printed 1998 **NASA Thesaurus** and the semi-annual, July 1998 **NASA Thesaurus Supplement**. In addition, the site includes several external links to other web sites devoted to technical and non-technical vocabularies and classification schemes.

The URL for the new NASA Thesaurus site is http://www.sti.nasa.gov/thesfrm1.htm

Comments regarding the site or the new electronic products can be forwarded to the CASI Lexicographer at mgenuardi@sti.nasa.gov or (301) 621-0114. Orders for any of the printed or electronic Thesaurus products can be directed to the NASA STI Help Desk at help@sti.nasa.gov or (301) 621-0390.

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NASA CONNECT

NASA CONNECT is a free, web-based, interactive, online program for which educators can register their elementary and middle school students. The 30-minute instructional program uses NASA projects, facilities, and researchers to show students how math and science are used everyday by NASA aeronautical engineers and scientists. NASA CONNECT 1998-1999 actually consists of a series of five programs, four of which feature a live call-in segment for students. Visit the NASA CONNECT web site at http://edu.larc.nasa.gov/connect/main.html and get connected!

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NASA History Office

Technical Drawings Web Site

The NASA History Office is pleased to announce a new web site with diagrams and technical drawings from Projects Mercury and Gemini, the first two major NASA human spaceflight programs. Take a look at the switches in the interior of the spacecraft or the parachute landing system. The diagrams come from contractor familiarization manuals and NASA press kits. Our special thanks to Kipp Teague who scanned these documents and set up the files in a very accessible way. The Mercury diagrams may be seen from http://www.hq.nasa.gov/office/pao/History/diagrams/mercury.html and the Gemini diagrams may be seen from http://www.hq.nasa.gov/office/pao/History/diagrams/gemini.html on the web. Please stay posted for diagrams on later NASA human spaceflight programs.

Historical Works Recently Placed on the World Wide Web

The NASA History Office has just placed online the *History of Research in Space Biology and Biodynamics at the Air Force Missile Development Center, Holloman Air Force Base, New Mexico, 1946-1958*, originally produced as a study by the Air Force. It is available at URL: http://www.hq.nasa.gov/office/pao/History/afspbio/top.htm

This early Air Force report contains information that NASA built upon in developing Project Mercury. It may be of special interest because of John Glenn's flight on STS-95 and because of the fortieth anniversary of the Mercury Seven selection in 1999. A very special thanks to Chris Gamble for formatting the complete text of this report.

We are also pleased to announce that *The High Speed Frontier: Case Histories of Four NACA Programs, 1920-1950 (NASA SP-445, 1980)* is now available online at URL:
http://www.hq.nasa.gov/office/pao/History/SP-445/cover.htm

This book by John V. Becker tells the histories of the high-speed airfoil program; transonic wind tunnel development; high-speed propeller program; and the high-speed cowlings, air inlets and outlets, and internal-flow systems. This short book is a good primer on some of the groundbreaking aeronautics work that NASA's predecessor organization did. Our special thanks go to Chris Gamble, who formatted the text and scanned all the photos for this attractive web version.

For more information on ordering any of the books in the NASA History Series, visit the NASA History Office web site.

http://www.hq.nasa.gov/office/pao/History/publicat.htm

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"Communicating NASA's Knowledge"

The report of NASA's Communicate Knowledge Process Team is now available online at URL http://www.hq.nasa.gov/ckreport/ For additional information or comments, contact Elsie Weigel at NASA Headquarters at eweigel@hq.nasa.gov

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Spinoff 1998 Now Available

The Release of Spinoff 1998 - A Tribute To NASA's 40th Anniversary

For 26 years, the *Spinoff* publication has covered successful technology transfer from NASA to private industry. Now, *Spinoff 1998* is available in tribute to NASA's 40th Anniversary.

This new edition summarizes the research and development efforts of the ten NASA field centers during the past year. Resulting technologies have in the past and present contributed to product commercialization, and will in the future affect economic and global decisions by industry. Included is a brief description of what NASA Headquarters and each of the ten field centers are doing to contribute to American scientific and technological growth. This idea of technological expansion brings us to the focal point of the publication, the spinoffs. These stories are representative of successes by manufacturers and entrepreneurs in developing commercial products and services which incorporate NASA technology to improve the economy and life for all humankind.

The spinoffs focus on areas concerning health and medicine, transportation, public safety, home and recreation, environment and resources, computer technology and industrial productivity. They will heighten your awareness of technology and give you a better understanding of NASA's technology transfer program and its benefits to you, the consumer. To highlight an example of a 1998 health and medicine Spinoff article, the American Cancer Society (ACS) joined NASA's Kennedy Space Center in a program to develop a flow cytometer used to discover why microgravity affects the immune system. The outcome of this cooperative agreement resulted in the development of a new instrument used for the DNA analyzation of solid human tumors. Ratcom, Inc. began marketing the instrument, the first commercial instrument stemming from the NASA/ACS partnership. Under a cooperative project with NASA, Ratcom later advanced the DNAnalyzer, developing a new technology that far surpassed the original. This technological breakthrough has become a significant tool in the fight against cancer and the AIDS virus.

NASA cytometer project for the Space Station spurred the development of this Instrument-important for cancer diagnosis-that can properly classify tumors.

The 1998 edition of *Spinoff* outlines the mechanisms NASA utilizes to transfer its technology, and the types of assistance it renders to industry, in order to advance technology transfer and commercialization efforts. Past, current, and future aerospace programs continue to provide technological advances that keep our industry in the forefront of global competition, contribute to major improvements in the health field, and improve our routines for daily living.

Spinoff 1998 is available online at http://www.sti.nasa.gov/tto/spinoff.html. To receive a printed copy, please contact the National Technology Transfer Center (NTTC) at (800) 678-6882.

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The NASA Commercial Technology Program ... *An Overview*

The NASA Commercial Technology Program encompasses a national network of specialized centers and organizations that assist United States businesses and industry in accessing, utilizing, and commercializing NASA-funded research and technology. The organizations work in close coordination with each other to provide a full range of technology transfer and commercialization services and assistance. The NASA Commercial Technology Network (NCTN), consists of the Commercial Technology Organizations at each of the NASA field centers, the Jet Propulsion Laboratory, the National Technology Transfer Center (NTTC), the six Regional Technology Transfer Centers (RTTCs), NASA Tech Briefs, COSMIC, UNISPHERE, and other specialized organizations and services. They are dedicated to fostering dual-use technology partnerships and the transfer and commercialization of NASA-sponsored research and technology.

The NCTN provides access to a wide variety of information resources that can be searched and consulted for research and technology, patents, technical expertise, and R&D facilities as well as for technology partnering, licensing and commercialization opportunities. In addition to serving as an integrated information resource, the NCTN is developing into an electronic marketplace for NASA-sponsored technology, facilitating communications, transactions and partnerships between NASA and the U.S. private sector.

Visit the NCTN web site at: http://www.nctn.hq.nasa.gov for more information on the NASA Commercial Technology Program and the members of its network.

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